CHAPTER 14: MASTER MAKING SECTION

CONTENTS

1. Theory of Operation
1. Master Making 1
2. Thermal Power Safety Switches 3

2. Removal and Assembly
1. Write Roller 5
2. Thermal Print Head (TPH) 6

3. Adjustment
1. Thermal Power of Thermal Print Head 7

3. Adjustment

1. Thermal Power of Thermal Print Head

Thermal power must be adjusted each time the Thermal print head is replaced.

1. Using Memory switch **No.201** (Test mode No.201), and make the switch selection to **"0"** by using the Print Position button. [refer to page APX(2)-1]
2. Disconnect the power supply from the machine.
3. Connect a Voltmeter to **No.1** and **No.3** pins of the connector **CN5** of the Power supply PCB.
4. Connect the power supply to the machine and turn ON the power by starting up Test mode **No.77** (TPH control signal).
5. Check to see that the Voltage reading on the Voltmeter equals to the voltage setting on the chart below for the new Thermal print head on the machine with the new resistance (Ω) setting. The resistance (Ω) of the new TPH is found printed on a seal attached on the TPH itself.
6. If the voltage on the Voltmeter does not match with the voltage on the chart below, turn the Volume adjust knob (**220 volt machine = VR41**) & (**110 volt machine = VR3**) until the correct voltage reading is obtained on the Voltmeter.
7. After the adjustment is done, exit from the Test mode.

Caution in Adjustment

- The new Thermal print head must be installed before making above adjustment.
- All three Thermal power safety switches (page 14-3) must be pressed to get the correct voltage reading on the Voltmeter.

Results of Incorrect Adjustment

- **If the voltage is too High:**
  The solid print image will be deformed and the heating elements of the Thermal print head will be damaged from overheat.
- **If the voltage is too Low:**
  The heat from the Thermal print head becomes too weak and the thin lines cannot be reproduced clearly.

Mode TR1510 (A4 Drum machine)

Resistance (Ω)	Voltage (V)
2380 ~ 2390	21.9
2391 ~ 2422	22.1
2423 ~ 2466	22.3
2467 ~ 2511	22.5
2512 ~ 2556	22.7
2557 ~ 2602	22.9
2603 ~ 2648	23.1
2649 ~ 2694	23.3
2695 ~ 2741	23.5
2742 ~ 2788	23.7
2789 ~ 2835	23.9
2836 ~ 2883	24.1
2884 ~ 2932	24.3
2933 ~ 2980	24.5
2981 ~ 3029	24.7
3030 ~ 3079	24.9
3080 ~ 3129	25.1
3130 ~ 3187	25.3
3188 ~ 3220	25.5

Mode TR1530 (B4 Drum machine)

Resistance (Ω)	Voltage (V)
2380 ~ 2402	21.7
2403 ~ 2446	21.9
2447 ~ 2491	22.1
2492 ~ 2536	22.3
2537 ~ 2582	22.5
2583 ~ 2628	22.7
2629 ~ 2674	22.9
2675 ~ 2721	23.1
2722 ~ 2768	23.3
2769 ~ 2816	23.5
2817 ~ 2864	23.7
2865 ~ 2913	23.9
2914 ~ 2961	24.1
2962 ~ 3011	24.3
3012 ~ 3060	24.5
3061 ~ 3110	24.7
3111 ~ 3161	24.9
3162 ~ 3212	25.1
3213 ~ 3220	25.3